

PRIVATE SWIMMING POOLS

**Department of Building Development Services
City of Springfield
(417) 864-1056
2008**

Several regulations regarding swimming pools are covered in the Building Code. Most pertain to barriers or enclosures intended to keep children from gaining access to the pool unsupervised thus reducing the potential for accidental drowning. This summary of those regulations is intended to help clarify the intent of the standards. The entire code text is included. If further help is needed in interpreting some part of the regulations, please contact the Building Development Services Department at (417) 864-1056.

SWIMMING POOLS, SPAS AND HOT TUBS

- A. Application** – These provisions shall control the design of barriers for residential swimming pools, spas and hot tubs. These design controls are intended to provide protection against potential drownings and near drowning by restricting access to swimming pools, spas and hot tubs.
- B. Outdoor swimming pool** – An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa shall be surrounded by a barrier which shall comply with the following:
 - 1. The top of the barrier shall be at least 48 inches (1219mm) above grade measured on the side of the barrier, which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51mm) measured on the side of the barrier, which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an above-ground pool, the barrier may be at ground level, such as the pool structure, or mounted on the top of the pool structure. Where the barrier is mounted on the top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102mm).
 - 2. Openings in the barrier shall not allow passage of a 4-inch-diameter (102mm) sphere.
 - 3. Solid barriers, which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.
 - 4. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches (1143mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1 ¾ inches (44mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1/34 inches (44mm) in width.
 - 5. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143mm) or more, spacing between vertical members shall not exceed 4 inches

- (102mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1 ¾ inches (44mm) in width.
6. Maximum mesh size for chain link fences shall be a 2 ¼-inch (57mm) square unless the fence has slats fastened at the top of the bottom which reduce the openings to not more than 1 ¾ inches (44mm).
 7. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than 1 ¾ inches (44mm).
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8. Access gates shall comply with the requirements of Section B, Items 1 through 7, and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool and shall be self-closing and have a self-latching device. Gates other than pedestrian access gate shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372mm) from the bottom of the gate, the release mechanism and openings shall comply with the following:
 - 8.1 The release mechanism shall be located on the pool side of the gate at least 3 inches (76mm) below the top of the gate; and
 - 8.2 The gate and barrier shall have no opening larger than ½ inches (13mm) within 18 inches (457mm) of the release mechanism.
 9. Where a wall of a dwelling serves as part of the barrier, one of the following conditions shall be met:
 - 9.1 The pool shall be equipped with a powered safety cover in compliance with ASTM F 1346; or
 - 9.2 Doors with direct access to the pool through that wall shall be equipped with an alarm, which produces an audible warning when the door and/or its screen, if present, are opened. The alarm shall be listed in accordance with UL 2017. The audible alarm shall activate within 7 seconds and sound continuously for a minimum of 30 seconds after the door and/or its screen, if present, are opened and be capable of being heard throughout the house during normal household activities. The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means, such as touch pad or switch, to temporarily deactivate the alarm for a single opening. Deactivation shall last for not more than 15 seconds. The deactivation switch(es) shall be located at least 54 inches (1372mm) above the threshold of the door; or
 - 9.3 Other means of protection, such as self-closing doors with self-latching devices, which are approved by governing body, shall be acceptable so long as the degree of protection afforded is not less than the protection afforded by Item 9.1 or 9.2 described above.
 10. Where an above ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps:

- 10.1** The ladder or steps shall be capable of being secured, locked or removed to prevent access; or
- 10.2** The ladder or steps shall be surrounded by a barrier which meets the requirements of paragraph B above, Items 1 through 9. When the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4 inches diameter (102mm) sphere.
- 11. Prohibited locations.** Barriers shall be located to prohibit permanent structures, equipment or similar objects from being used to climb them.
- 12. Barrier exceptions.** Spas or hot tubs with a safety cover which complies with ASTM F 1346, as listed in Section AG107 of the adopted edition of the International Residential Code, shall be exempt from the provisions of this appendix.

INDOOR PRIVATE SWIMMING POOL:

All walls surrounding an indoor private swimming pool shall comply with item 9 above.

PROHIBITED LOCATIONS:

Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers.

EXCEPTIONS:

The following shall be exempt from the provisions of this section.

1. A spa or hot tub with an approved safety cover.
2. Fixtures that are drained after each use.

**FENCING AGREEMENT FOR A
SWIMMING POOL PERMIT
Department of Building Development Services
City of Springfield, MO
(417) 864-1056**

Fencing requirement for Private In-ground swimming pools are Above-ground swimming pools with Walls less than 48" above the ground.

To property owners of _____
Address

What follows are the requirements for fences around pools. By signing this you are confirming that you have read these requirements and received a copy of this and will comply with them before adding any water to your pool.

Common to all Fences

1. The pool will be enclosed by a continuous fence, at least 48" high above the ground measured on the side of the fence facing away from the pool. The walls of building on the property may serve as fencing.
2. There shall be no more than 2" of space between the bottom of the fence and the ground.
3. Fences, whether solid or with openings, shall not contain indentations, openings or protrusions which would provide foot and hand holds for climbing.
4. No fence shall be located so as to cause permanent structure or equipment to be used to climb the fence.
5. Openings in the fence shall never exceed 1 ¾ inch and/or 4 inches.

Fences and other than Chain Link, Wire or Lattice

Fences made up of horizontal and vertical members shall have the following design:

1. Fences that have horizontal members closer together than 45" shall have such members on the pool side of the fence and the spacing between the vertical members shall not exceed 1 ¾ " in width.
2. Fences that have horizontal members at least 45" apart shall not have vertical members spaced more than 4" in width apart.

Chain Link and Wire Fences

Standard chain link and wire fences have openings that are too large to meet the requirements and, thus, allow for toe holds that permit climbing. A chain link or wire fence

must, therefore, have slats fastened at top or bottom woven through the fence to reduce the openings to no more than 1 $\frac{3}{4}$ " measured diagonally and no more than 1 $\frac{1}{4}$ " square.

Lattice Fences

Lattice fences shall have openings no greater than 1 $\frac{3}{4}$ " measured diagonally and no more than 1 $\frac{1}{4}$ " square.

Gates and Gate Latches

1. Gates shall be designed exactly like the fence requirements above with the same vertical member spacing and slat requirements.
2. Gates are to be self-latching and self-closing (they shall swing shut and latch on their own). The release mechanism for the latch shall: (a) Be at least 54" above the bottom of the gate, or (b) be located on the pool side of the gate at least 3" below the gate top and there shall be no openings greater than $\frac{1}{2}$ " within 18" of the release.

Walls of Structures Used as Fencing

When walls of your house or accessory buildings are used as fencing for the pool ALARMS are required on all doors in these walls that lead into the pool area when there is no approved fence between the door and the pool.

The alarms shall:

1. Produce an audible warning when the door or its screen door is opened.
2. Sound continuously within 7 seconds of the door opening for a period of 30 seconds.
3. Have at least a sound pressure reading of 85 DBA at 10' and the sound will not be able to be confused with other alarm sounds in the house.
4. Automatically reset.
5. Be equipped with manual means to deactivate it temporarily for no longer than 15 seconds for a single door opening. The deactivation devices shall be at least 54" above the threshold of the door.

Exception: The alarms are not required if your pool is provided with an approved power safety cover.

Signature of Owner: _____

Date Signed: _____

SWIMMING POOL PERMIT REQUIREMENTS

Before a pool permit will be issued the application must be submitted for review. As a part of the review the building inspector will inspect the site for the following elements, which must be installed before a pool permit can be issued.

1. The entire pool and deck area must be secured from access by permanent fencing or construction fencing, which shall remain in place until the permanent barriers are in place.
2. All doors with direct access to the pool shall be equipped with an alarm as defined in paragraph 9.2 of this document. If the pool is to be equipped with a power safety cover the door alarms as defined in paragraph 9.2 will not be required.

Once the on-site inspection has been completed and approved the pool permit may be issued.

All electrical work including all conduit, bonding and wiring shall be installed in accordance with the City of Springfield adopted electrical code and shall only be installed by a City of Springfield recognized electrical contractor. **NOTE: FAILURE TO OBTAIN ANY OF THE REQUIRED ROUGH-IN ELECTRICAL INSPECTIONS BEFORE THE WORK IS COVERED SHALL RESULT IN THE REMOVAL OF ANY AND ALL MATERIALS IN ORDER TO CONDUCT THE REQUIRED INSPECTIONS.**

REQUIRED INSPECTIONS

1. Site inspection before issuance of the required permits.
2. All required electrical inspections as defined under the electrical permit.
3. Final building permit inspection.

“I CERTIFY THAT I HAVE READ AND ACKNOWLEDGE THE CONTENT OF THIS DOCUMENT.”

Signature of Owner or Authorized Agent: _____

Printed: _____ Date Signed: _____